Sears

owners manual

MODEL NO. 247.298750

CAUTION:
Read SAFETY RULES and INSTRUCTIONS carefully

Sears CRAFTSMAN®

5 H. P. CHAIN DRIVE TILLER

- Assembly
- Operating
- Maintenance
- Repair Parts

SEARS, ROEBUCK AND CO., Chicago, Ill. 60684 U.S.A.
and SIMPSONS-SEARS LIMITED, Toronto, Canada

PART NO. 770-7761

PRINTED IN U.S.A.

FULL ONE YEAR WARRANTY

For one year from the date of purchase, Sears will repair any defect in material or workmanship in this TILLER at no charge.

If the TILLER is used for commercial or rental purposes, this warranty applies for only thirty days from the date of purchase.

Warranty service is available by contacting the nearest Sears store or Service Center throughout the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co.
Sears Tower
BSC 41-3
Chicago, IL 60684

IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

Your tiller is a precision piece of power equipment, not a play thing. Therefore exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR TILLERS

1. Read the Operating and Service Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power tiller. Only persons well acquainted with these rules of safe operation should be allowed to use your tiller.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
5. Do not wear loose fitting clothing that could get caught on the tiller.
6. Do not start the engine unless the shift lever is in the neutral (N) position.
7. Do not stand in front of the tiller while starting the engine.
8. Do not place feet and hands on or near the tines when starting the engine or while the engine is running.
9. Do not leave the tiller unattended with the engine running.
10. Do not walk in front of the tiller while the engine is running.
11. Do not fill gasoline tank while engine is running. Spilling gasoline on hot engine may cause a fire or explosion.
12. Do not run the engine while indoors. Exhaust gases are deadly poisonous.
13. Be careful not to touch the muffler after the engine has been running, it is hot.
14. Before any maintenance work is performed or adjustments are made, remove the spark plug wire and ground it on the engine block for added safety.
15. Use caution when tilling near buildings and fences, rotating tines can cause damage or injury.
16. Before attempting to remove rocks, bricks and other objects from tines, stop the engine and be sure the tines have stopped completely. Disconnect the spark plug wire and ground to prevent accidental starting.
17. Check the tine and engine mounting bolts at frequent intervals for proper tightness.
18. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
19. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

NOTE

A spark arrest muffler is available as an accessory part. The part number is listed in the parts section of this manual. Check muffler legal requirements in your area

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INTRODUCTION

This Product has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest Sears, or Simpson-Sears Service Department. They have well qualified, competent trained technicians and the proper tools to service or repair this unit.

PRE-ASSEMBLY

NOTE

The right and left side of your tiller is determined from operator's position.

Before any step is undertaken, the instructions for that step should be read through.

TOOLS REQUIRED: See Figure 1

1. (1) ½" Socket, open or box wrench.
2. (2) 9/16" Socket, open or box wrench.
3. (1) ¼" Flat Screwdriver.

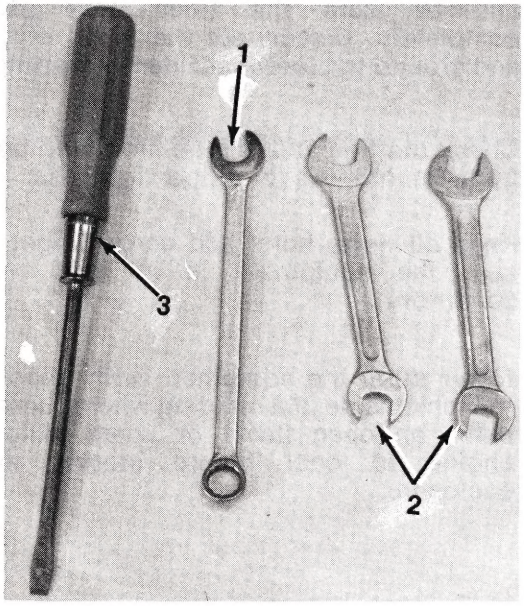


FIGURE 1.

MATERIALS REQUIRED:

1. Funnel (for gas and oil - **NOTE: DO NOT MIX**)
2. S.A.E.-30 Oil-For Service SC, SE, SD or MS 1¼ pints
3. Gas (regular)
4. Cleaning rag

PARTS IN CARTON

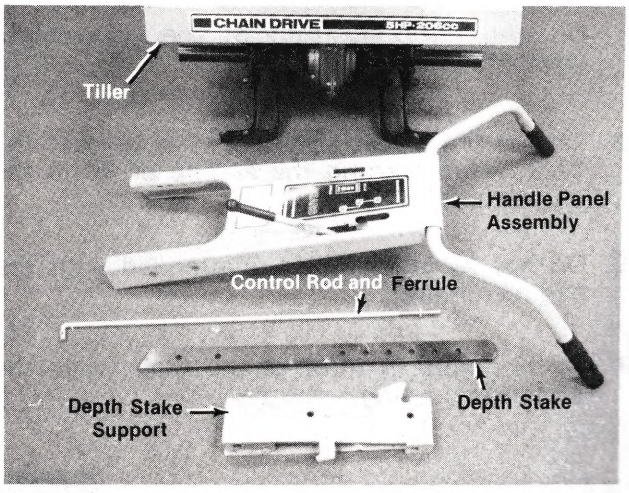


FIGURE 2.

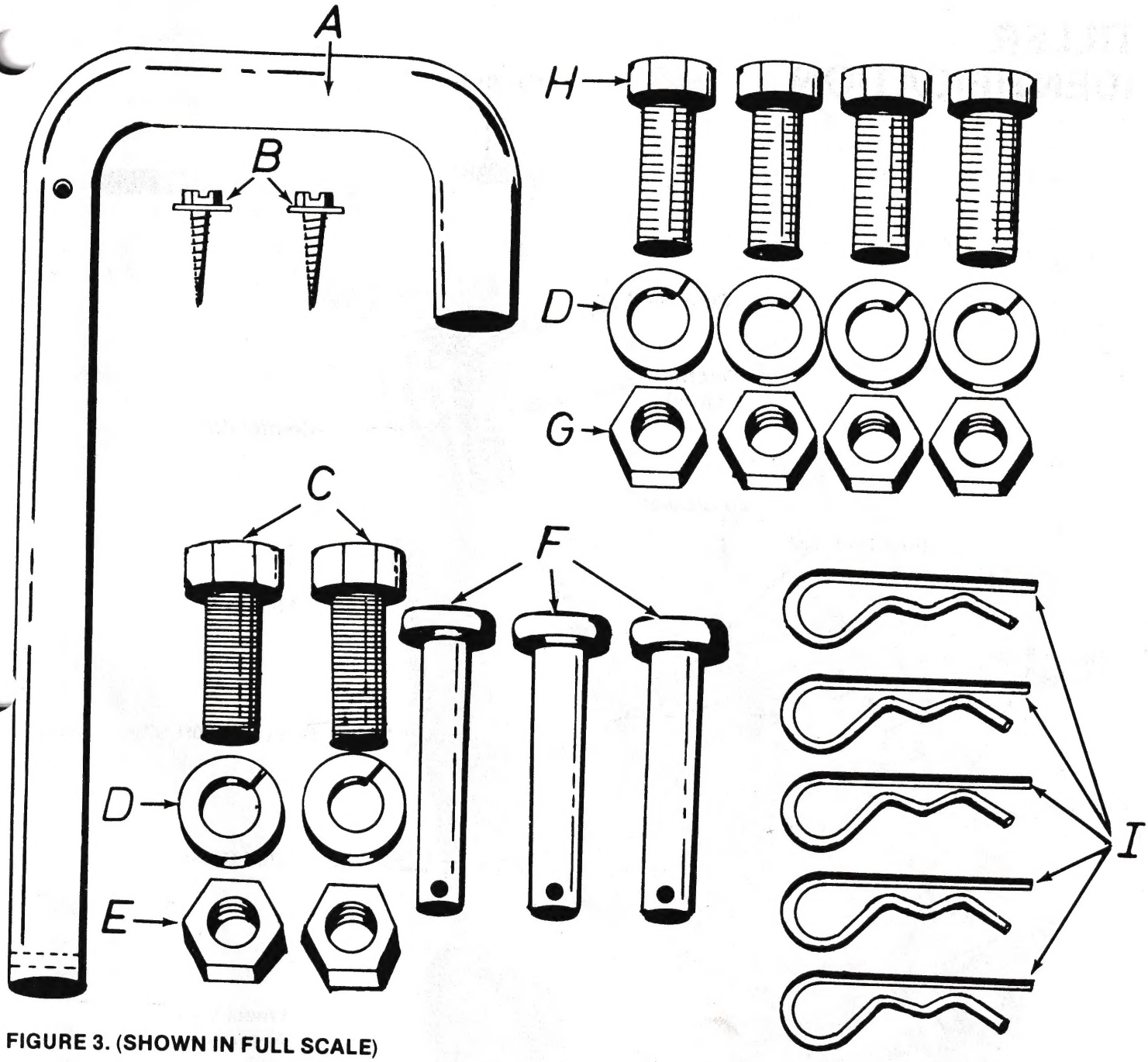


FIGURE 3. (SHOWN IN FULL SCALE)

NOTE

THE LETTERS LISTED BELOW WILL BE REFERRED TO THROUGHOUT THE FOLLOWING TEXT FOR EASIER HARDWARE IDENTIFICATION.

LIST OF CONTENTS IN HARDWARE PACK:

A (1) "U"-Clevis Pin ½" Dia.
B (2) Self Tapping Screws #8 x .62"
C (2) Hex Screws 3/8-24 x 1.00"
D (6) Lockwasher 3/8" Screw
E (2) Hex Nut 3/8-24 Thread
F (3) Clevis Pins
G (4) Hex Nuts 3/8-16 Thread
H (4) Hex Screws 3/8-16 x 1.00"
I (5) Hair Pin Cotter

TILLER IDENTIFICATION

FIGURE 4.

ASSEMBLY INSTRUCTIONS

1. Handle Panel Attachment.

For shipping purposes, the handle mounting brackets are pivoted down. With a 9/16" wrench loosen the hex bolt holding the handle mount brackets. See figure 5.

Pull handle mount brackets up so that the top hole in bracket lines up with forward hole in chassis. See figure 5.

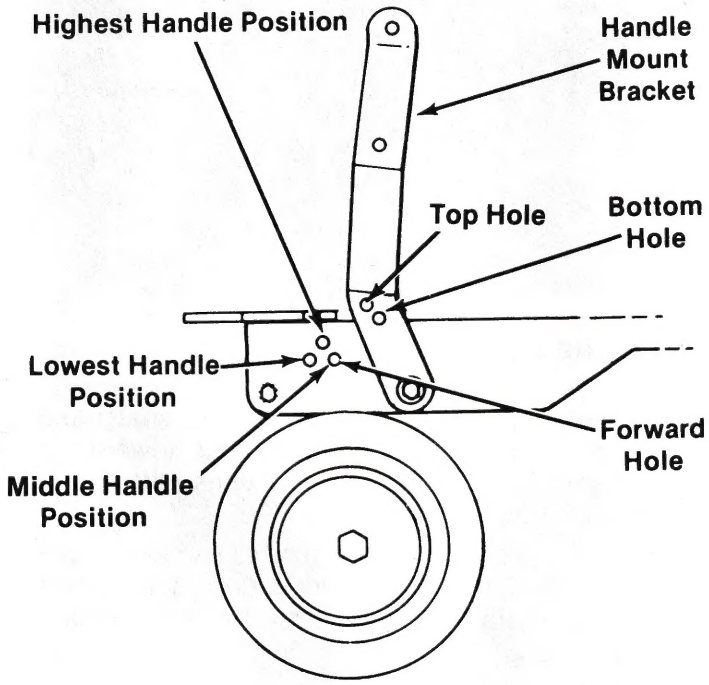


FIGURE 5.

Secure handle mount brackets with hex bolt (C), lockwasher (D) and hex nut (E). See hardware, page 4.

The handle panel is attached by sliding it down over the handle brackets on the chassis and installing four hex bolts in the lower holes of the handle panel. Place bolts through the handle panel; head to the outside. See figure 6.

NOTE

Do not tighten until all four bolts are in place.

Four hex bolts (H), lockwashers (D) and hex nuts (G) will be found in the hardware pack. See figure 6.

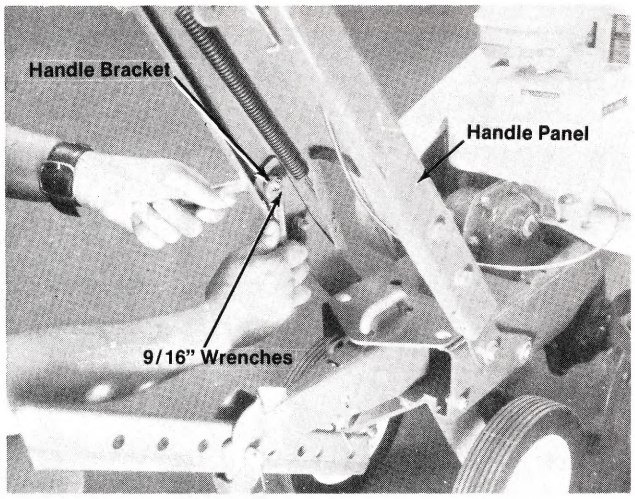


FIGURE 6.

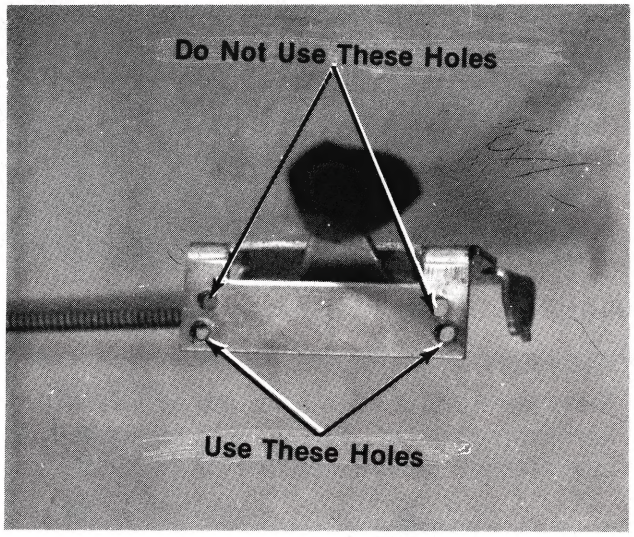


FIGURE 7.

2. Throttle Control Lever.

NOTE

The throttle control has four holes in the lever bracket. The holes on the outside edge are to be used for mounting on this unit. See figure 7.

Place throttle control lever up through the handle panel and secure with two self tapping screws (B), using a ¼" flat screwdriver. See figure 8.

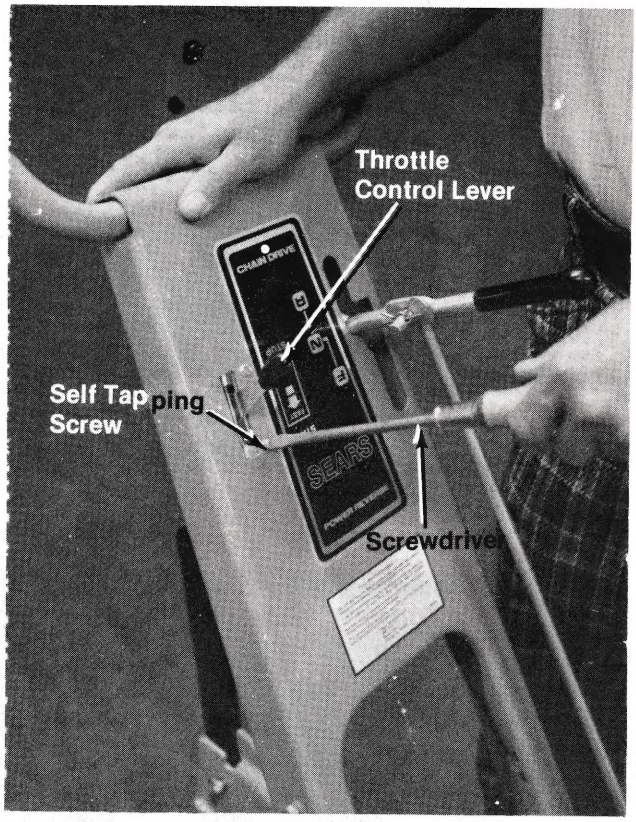


FIGURE 8.

3. Clutch Control Rod.

The control rod comes from the factory with the ferrule preadjusted. (See figure 9.) Place ferrule in idler bracket. Secure with hair pin cotter.

NOTE

Figure 9 has the belt guard removed for clarity, it is not necessary to remove for control rod assembly.

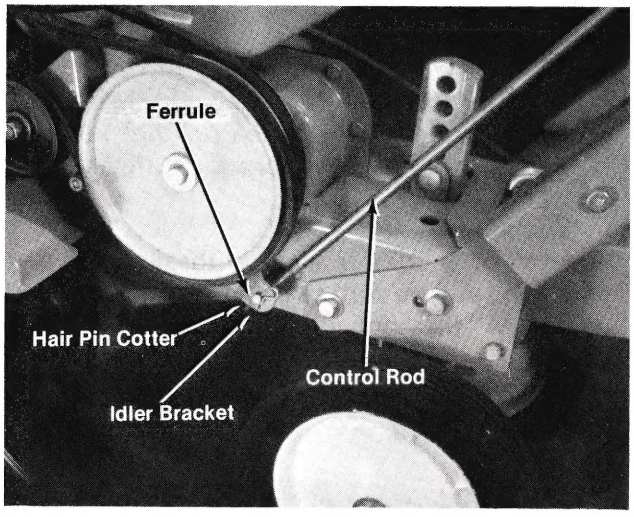


FIGURE 9.

Place the shift lever (located on handle panel) in neutral (N) position. Place other end of control rod in shift lever and secure with hair pin cotter.

4. Tine Attachment

a. The outer tines have been reversed on the tine shaft for shipping purposes. See figure 10.

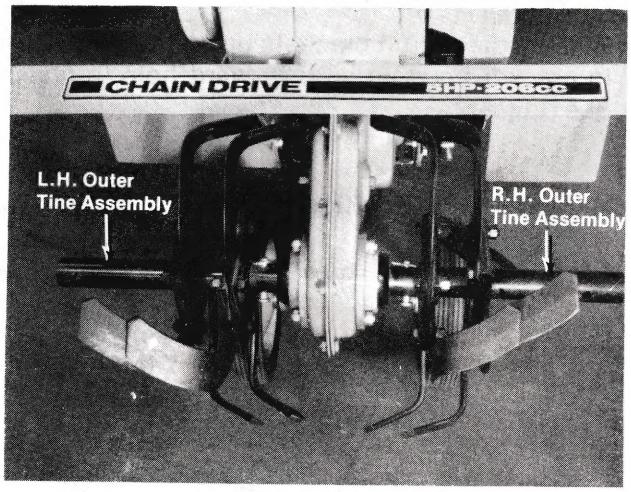


FIGURE 10.

Remove outer tines from the tine shaft and reinstall with the tine hub facing inward as illustrated in figure 11. Secure tines with clevis pins (F) and hair pin cotters (I).

b. The inner tine assemblies have been installed at the factory and in their correct operating position and do not require changing.

c. See tine adjustment for information on changing width of tilling path, page 11.

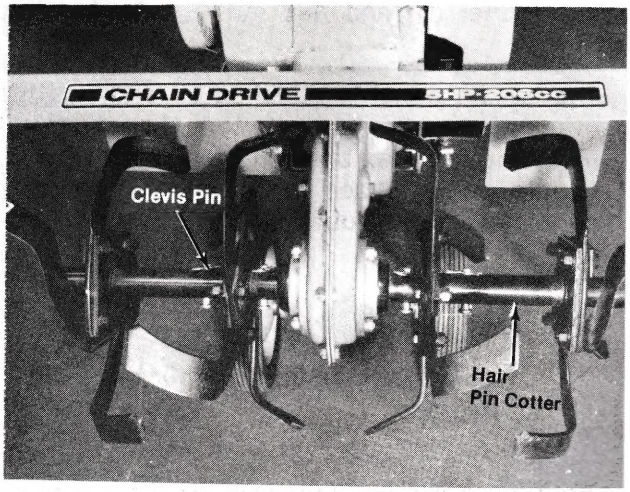


FIGURE 11.

5. Depth Stake Support Attachment.

Slide the depth stake support into the chassis and secure with "U" clevis (A) and hair pin cotter (I) See figure 12.

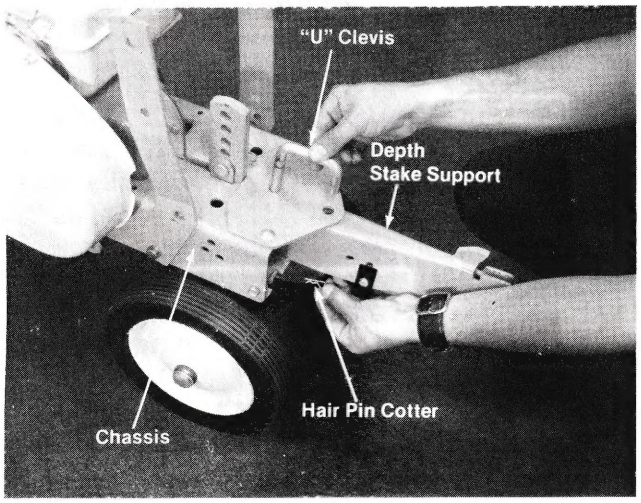


FIGURE 12.

6. Depth Stake Attachment.

Slide the drag stake into the depth stake support depth and secure with clevis pin (F) and hair pin cotter (I). See figure 13.

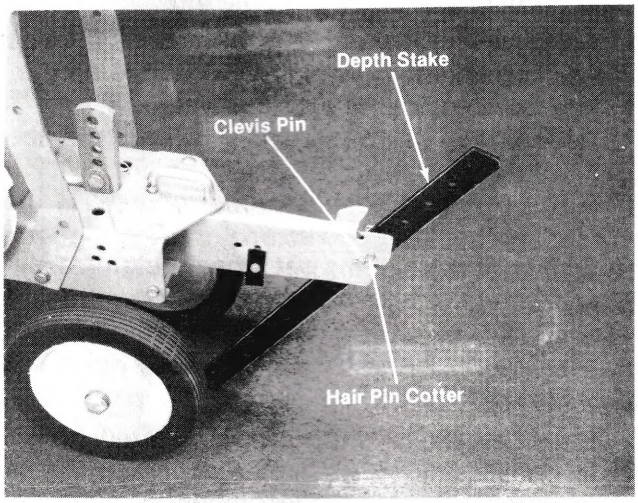


FIGURE 13.

ENGINE PREPARATION

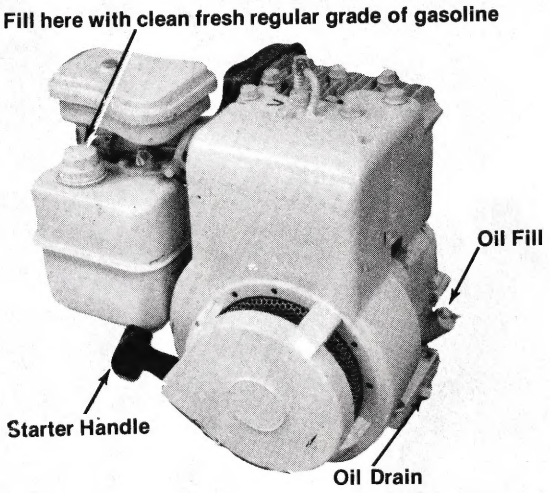


FIGURE 14.

1. Before starting, fill crankcase with 1¼ pints of SAE 30 heavy duty detergent oil or to top of filler neck. Be sure that the engine is level. See figure 14.
2. Change oil after first 2 hours of operation and every 25 hours thereafter. Check oil every 8 operating hours.
3. Fill fuel tank with clean fresh regular grade of gasoline.

OPERATION

TO START ENGINE:

1. CAUTION: BE SURE NO ONE IS STANDING IN FRONT OF THE TILLER WHILE THE ENGINE IS RUNNING OR BEING STARTED.
2. Place the shift lever in the neutral (N) position. See figure 16.

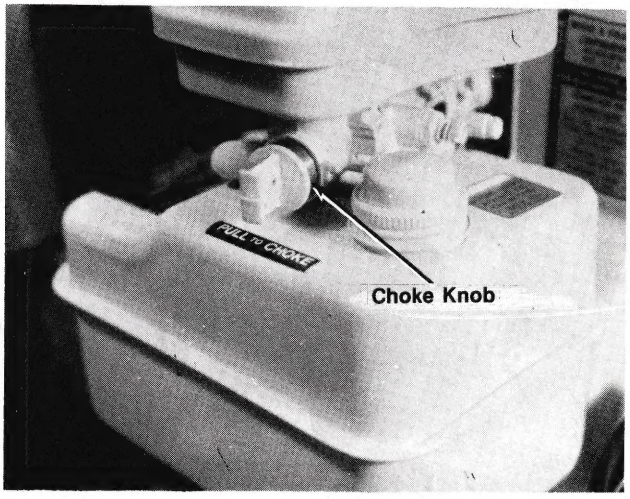


FIGURE 15.

3. Choke Engine. Pull choke knob out to choke engine. See figure 15. Once the engine starts, push in the choke knob.

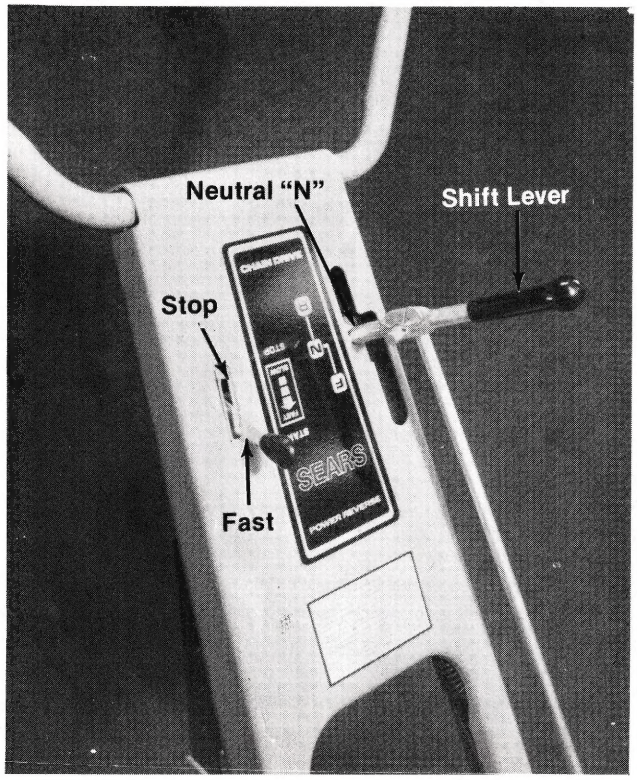


FIGURE 16.

4. Move the throttle control lever forward to FAST POSITION. See figure 16.

FIGURE 17.

5. Stand at side of the tiller, grasp the starter handle and pull out rapidly. Return it slowly to the engine. Repeat as necessary.

NOTE

If engine is warm, start with the control in the "FAST" position. Choking may not be necessary. See figure 16.

6. Move the throttle control to SLOW when transporting the tiller. When the tiller is being moved to or from the garden, the depth should be pivoted forward until it engages the drag stake retainer clip. The machine may be moved under its own power, without seriously damaging grass areas as long as it is allowed to move freely. If the operator holds back, it will start to dig.

TILLING

1. Adjust depth stake by removing clevis pin and hair pin cotter, changing stake position, then replacing hair pin cotter and clevis pin. See figure 18.
   A. Lowering the depth stake will slow the tiller and make it till deeper.
   B. Raising the depth stake will allow the tiller to move faster and till shallower.
   C. For normal tilling, set depth stake at the fifth or sixth hole from the top.
2. Adjust wheel yoke by removing clevis pin and hair pin cotter, changing wheel yoke height, and replacing clevis pin. See figure 18.
   A. Raising the wheel yoke will allow the tiller to till deeper.
   B. Lowering the wheel yoke will allow the tiller to till shallower.
   C. For normal tilling set wheel height at the second or third hole from the top.

CONTROLS

LOCATION AND USE.

1. Shift Lever: The shift lever is located on the left hand side of the handle panel. Left hand is determined from the operator's position, standing behind the tiller.
   A. Forward (F)—Move the lever to the left and down (Forward) to set unit in motion.
   B. Neutral (N)—Move lever to center detent.
   C. Reverse (R)—Pull the lever back (upward) slowly and intermittently.
2. Throttle Control: The throttle control lever is located on the right hand side of handle panel.
   A. Stop—Pull lever back (upward) to stop the unit.
   B. Start—Push lever forward (down) to start unit.

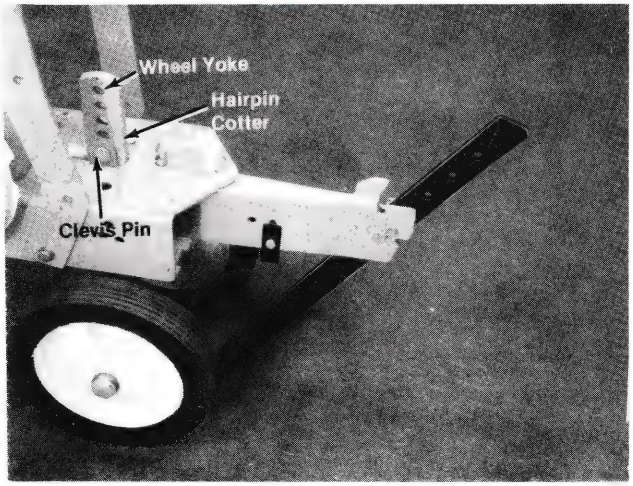


FIGURE 18.

TILLING HINTS

Soil conditions are important for proper tilling.

The tines will not readily penetrate dry, hard soil. This may contribute to excessive bounce and difficult handling of the tiller. Hard soil should be moistened prior to tilling.

Extremely wet soil will cause soil to ball up or clump.

When tilling in the Fall, all vines and long grass should be removed. This will prevent vines from wrapping around the tine shaft which slows tilling operation.

1. The best method will be determined by the soil condition. In some soils, the desired depth is obtained the first time over the garden. In other soils, the desired depth is obtained by going over the garden two or three times. In the latter case, the depth stake should be lowered before each succeeding pass over the garden, and passes should be made across the length and width of the garden alternately. Rocks which are turned up should be removed from the garden area.

2. **Handle Pressure:** Further control of tilling depth and travel speed can be obtained by variation of pressure on the handles.

When using the depth stake a downward pressure on the handles will increase the working depth and reduce the forward speed. An upward pressure on the handles will reduce the working depth and increase the forward speed. The type of soil and working conditions will determine the actual setting of the depth stake and the handle ground, while the tiller is resting on the tines

CULTIVATING

For cultivating, a two to three inch depth is desirable. Setting the wheels and depth stake so that the wheels are about two inches above the ground, while the tiller is resting on the tines and depth stake, will allow the machine to work at cultivating depth. The throttle should be set to control forward movement to a slow walking speed. With standard tines, the working width of the machine is 26 inches. See figure 19.

Tilling width can be increased from 26 inches to 28 inches by removing the clevis pin and hair pin cotter and sliding the outer tines out one (1) inch, and replacing the clevis pin and hair pin cotter. See figure 20.

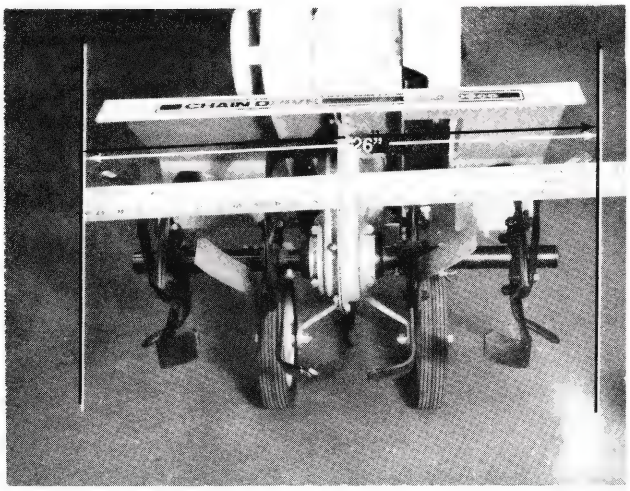


FIGURE 19.

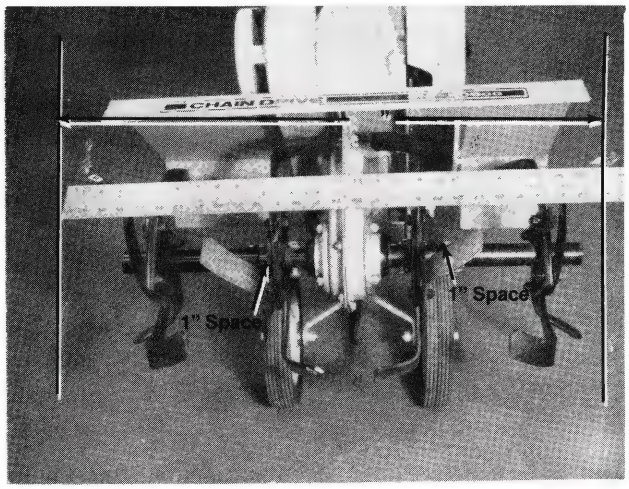


FIGURE 20.

For cultivation, this may be reduced to 14 inches by removing the outer tines. See figure 21.

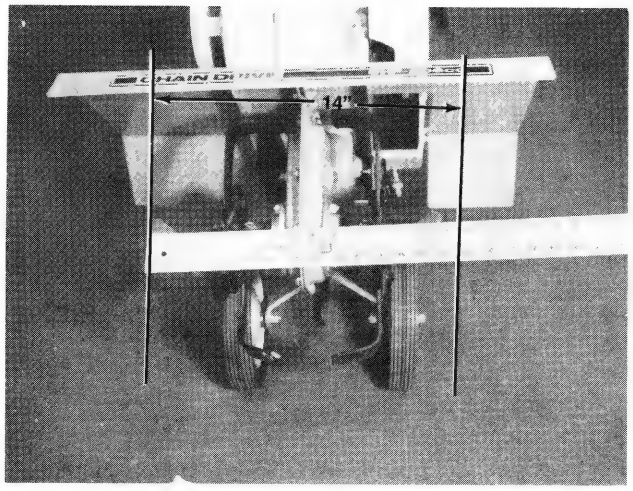


FIGURE 21.

In laying out plant rows be sure to allow enough width (14" to 15") to permit cultivation between the rows.

In growing corn or similar crops, check-row planting will permit cross cultivation and practically eliminate hand hoeing. The tiller has many uses other than tilling and cultivating a garden. One of these is the preparation of lawn area for seeding. The tiller will prepare a deep seed bed which will be free of hard untilled spots, allowing a better stand of grass to grow. The tiller is very useful for loosening hard soil for excavation with a shovel. Your tiller may be used for mixing compost in the pile, or for mixing it with the soil in your garden. This should be done after the soil has been broken to the full working depth. The compost should be worked in to a depth of six to eight inches. This may be done by working the length of the garden, and then by mixing separate passes across its width. The addition of decayed organic matter will substantially increase the fertility of your garden. For proper decaying action, fertilizer should be applied and worked in with the mulch materials. The breaking up of the leaves and straw and the mixing of it with the several inches of soil cause the soil to hold moisture longer and allow proper aeration of the plant root system. This also retards the growth of weeds.

The U.S. Department of Agriculture and various state and local agencies offer published booklets and expert advice on all phases of gardening. They should be consulted regarding soil information, planting dates, and the most satisfactory varieties of crop for your particular area.

MAINTENANCE

BELT REPLACEMENT:

If belt replacement is required order belt or belts by part number from your nearest Sears Service Center.

FORWARD DRIVE BELT - Part No. 754-0154
½" x 37" long

REVERSE DRIVE BELT - Part No. 754-0201
½" x 41" long

Your tiller has been engineered with the above belts and should not be replaced with an off-the-shelf belt. The above belts are of special material (Kevlar Tensile).

Removing and replacing the FORWARD DRIVE BELT.

1. Remove the belt guard, by removing four (4) hex self tapping screws.
2. Press down on the left side of the tine shield and slip off the belt guard. See figure 23.

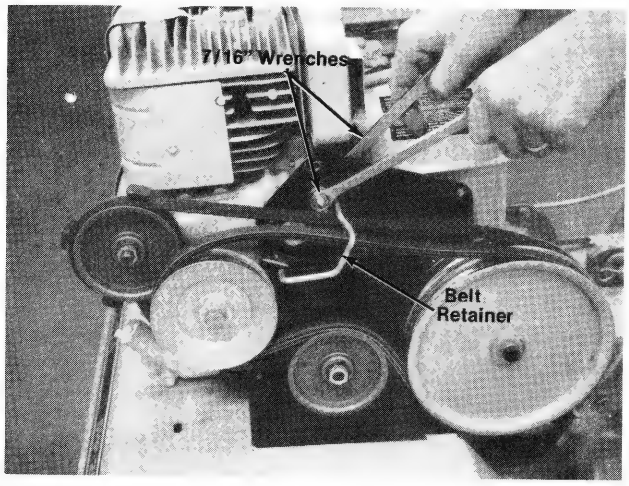


FIGURE 22.

3. Loosen, do not remove the hex screw and nut holding the belt retainer with two 7/16" wrenches. See figure 22.

FIGURE 23.

4. Pull the shift lever back into reverse (R) position and lift the forward drive belt off or the engine pulley, flat idler and transmission pulley. See figure 24.

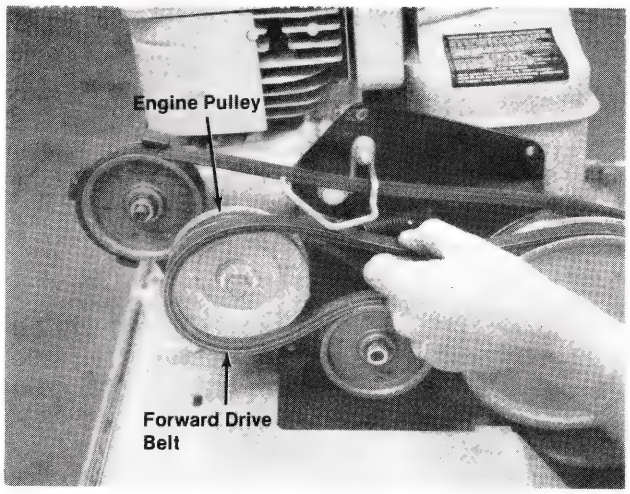


FIGURE 24.

Reassemble the new belt with the "V" side of belt position in "V" groove of engine pulley. Assemble in reverse order of steps 1, 2 and 3.

Removing and replacing the REVERSE DRIVE BELT.

1. To remove the reverse drive belt you must remove the forward drive belt first. See removing the forward drive belt section, steps 1, 2, 3 and 4.
2. With the shift lever in neutral (N) position, slip the reverse drive belt off of the chain case pulley and "V"-Groove of engine pulley. See figure 25.

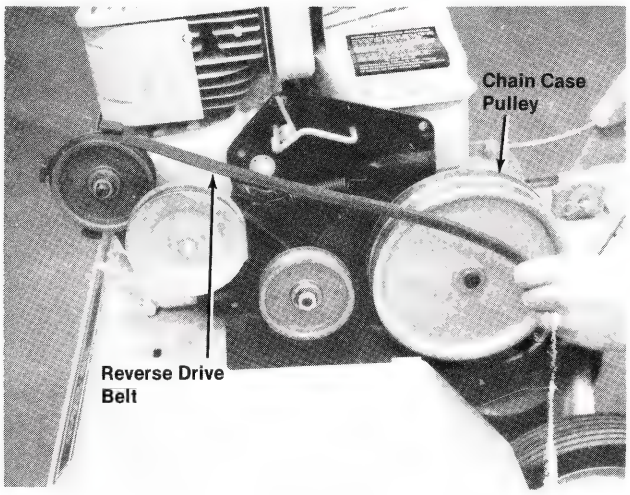


FIGURE 25.

3. Place the shift lever in reverse (R) position, remove hex locknut holding the flat reverse idler pulley. See figure 26. Pull the idler bracket forward with one hand.

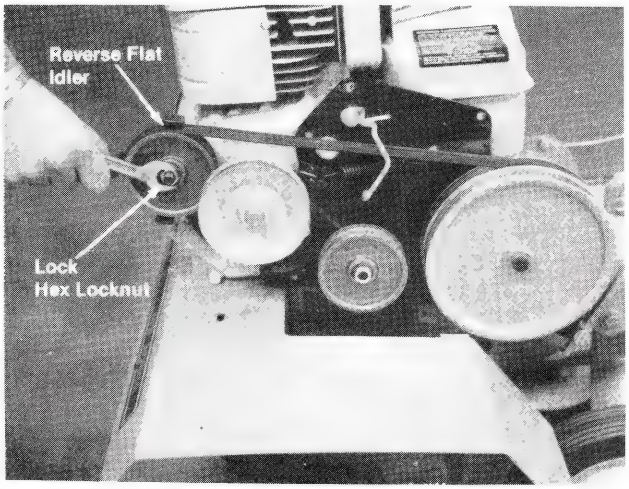


FIGURE 26.

Slip off flat idler and belt together. See figure 27.

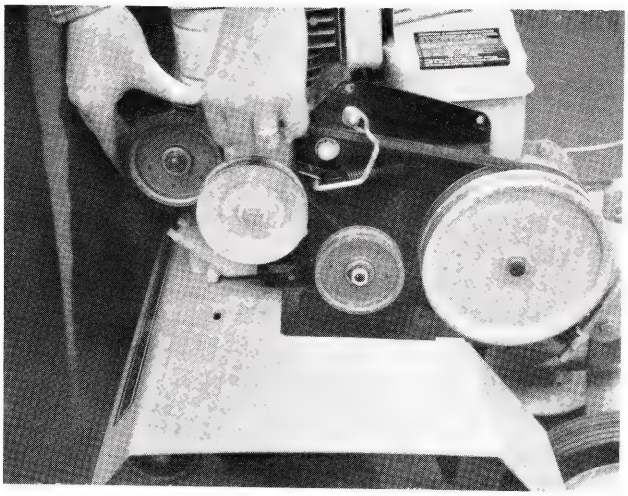


FIGURE 27.

4. Upon reassembly of new reverse drive belt make sure the belt is turned inside out (V-portion of belt to the outside and flat side of belt to the inside). Loop one end of belt over flat idler pulley and place flat idler pulley and belt back in position on idler bracket.

NOTE

Flat idler pulley must be installed with the sleeve side towards the idler bracket. See figure 28.

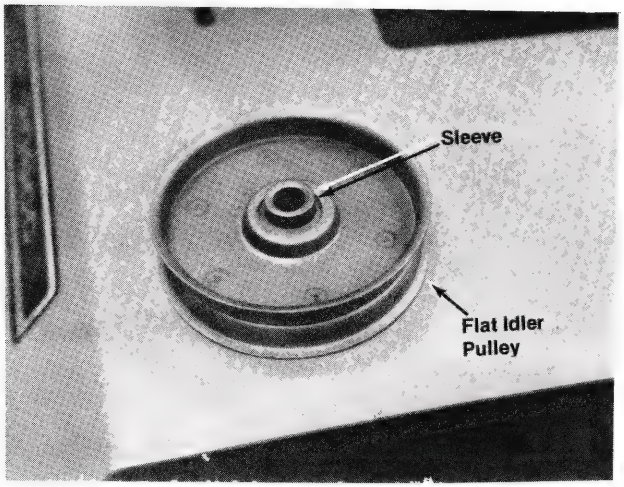


FIGURE 28.

Secure with hex locknut.

CARE AND MAINTENANCE:

Transmission:

The transmission is pre-lubricated and sealed at the factory. It requires no additional lubrication unless the transmission is disassembled. To fill with grease, lay the left half of the chain case on its side, add 14 ounces of Plastilube #1 grease and assemble the right half to it. This grease can be from your nearest Sears Service Center. (Order Part No. 737-0133.)

Engine:

1. You MUST CHANGE THE OIL in the crankcase after the first two hours of operation of your new engine and after each 25 hours of use thereafter to ensure proper lubrication of internal parts for trouble free operation and to prevent costly repair due to excessive wear. (Take care to remove dirt around filler plug.) Be sure oil level is maintained full to point of overflowing. See figure 29.

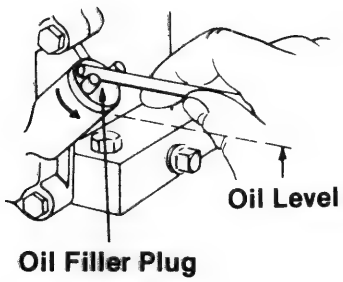


FIGURE 29.

To change oil remove drain plug (figure 30) and tip the tiller forward while engine is warm. Replace drain plug. Remove oil filler cap and refill with new oil of proper grade. Replace filler cap.

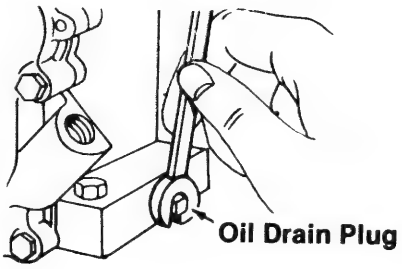


FIGURE 30.

2. Always use the PROPER FUEL in your engine. Use only a good grade of fresh, clean, regular gasoline. Do not use gasoline that has been sitting for a long period of time. Stale gasoline may cause engine to run poorly or not at all.

3. Keep your engine CLEAN. Wipe off all spilled fuel and oil. Keep the engine clean of foreign matter and be sure the cooling fins on the cylinder are kept clean to permit proper air circulation. You must REMEMBER that this is an air cooled engine and free flow of air is essential to proper engine performance and life.

4. You must SERVICE YOUR AIR CLEANER. The air cleaner prevents damaging dirt, dust, etc. from entering the carburetor and being forced into the engine and is important to engine life and performance.

To remove air cleaner:

A. Remove screw.

B. Remove air cleaner carefully to prevent dirt from entering carburetor.

C. Take air cleaner apart.

D. Wash element in detergent and solution by squeezing similar to a sponge.

E. Wrap foam in cloth and squeeze dry.

F. Coat element with two tablespoons of engine oil squeeze to distribute and remove excess oil. See figure 31.

G. Wipe air cleaner body with same solution to remove excess oil.

H. Reassemble (see figure 31) by inserting element into body and snapping cover into place, fasten to carburetor with screw.

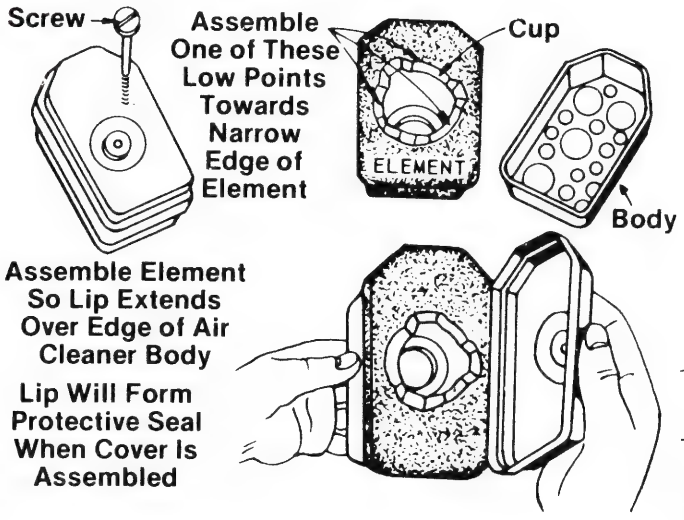

Screw
Assemble One of These Low Points Towards Narrow Edge of Element
Cup
ELEMENT
Body
Assemble Element So Lip Extends Over Edge of Air Cleaner Body
Lip Will Form Protective Seal When Cover Is Assembled

FIGURE 31.

NEVER RUN YOUR ENGINE WITHOUT AIR CLEANER COMPLETELY ASSEMBLED.

Carburetor Adjustment:

1. Never make unnecessary adjustments. The factory recommended settings are correct for most applications.

2. If adjustments are needed, proceed as follows:

   A. INITIAL ADJUSTMENT. See figure 32. Close needle valve (turn clockwise) then open 1½ turns (turn counterclockwise). This initial adjustment will permit the engine to be started and warmed up before making final adjustment.

   B. FINAL ADJUSTMENT. See figure 32. With engine running at fast operating speed (approximately 3,000 RPM without load) close the needle valve (turn clockwise) until engine starts to lose speed (lean mixture). Then slowly open needle valve (turn counterclockwise) past the point of smoothest operation until engine just begins to run unevenly. This mixture should be rich enough for best performance under load. Hold throttle in idling position. Turn idle speed adjusting screw until fast idle is obtained (1,750 RPM). Test the engine and if it tends to stall or die out, it usually indicates that the mixture is slightly lean and it may be necessary to open the needle valve slightly to provide a richer mixture. This richer mixture may cause a slight unevenness in idling.

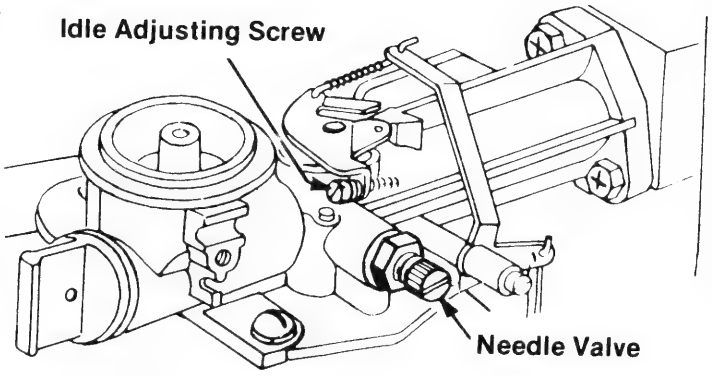


FIGURE 32.

NOTE

ALWAYS ALLOW SEVERAL SECONDS BETWEEN EACH ADJUSTMENT FOR THE ENGINE CARBURETOR TO REACT TO THE NEW SETTING.

3. Never attempt to change maximum engine speed as THIS IS PRESET AT THE FACTORY. Excessive speed, caused by by-passing the governor, can cause extensive damage to your engine.

SPARK PLUG:

1. Remove the spark each time you change the oil and inspect it. See figure 33.
   A. The electrodes should be kept clean and free OF CARBON. The presence of carbon or excess oil will greatly deter proper engine performance.
   B. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge. This specification should be .030.
2. If you need a spark plug refer to the parts list for the proper replacement spark plug.

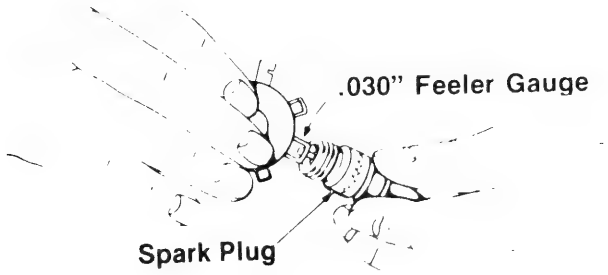


FIGURE 33.

ADJUSTMENT OF THROTTLE CONTROL CABLE

1. Place the throttle control lever in stop position.

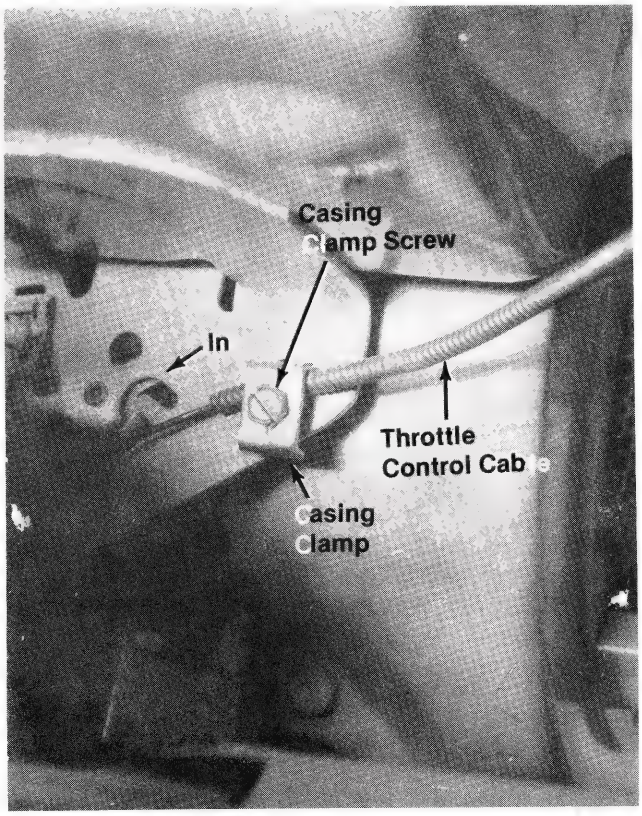


FIGURE 34.

2. Loosen the casing clamp screw and move the throttle control wire in as far as possible.
3. Tighten the casing clamp screw. See figure 34.

STORAGE:

If the tiller is not to be used for a while, the following procedure should be followed. The tines, depth stake, transmission, and wheel should be cleaned of all dirt. It is very important that the unit be stored in a level position to prevent engine oil from draining into the cylinder head cavity.

Engines on tiller to be stored between seasons should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, and fuel tank.

(a) All fuel should be removed from fuel tank. Run the engine until it stops from lack of fuel. The small amount of fuel that remains in the sump of the tank should then be removed by absorbing it with a clean dry cloth.

(b) Clean dirt and chaff from cylinder, cylinder head fins and blower housing.

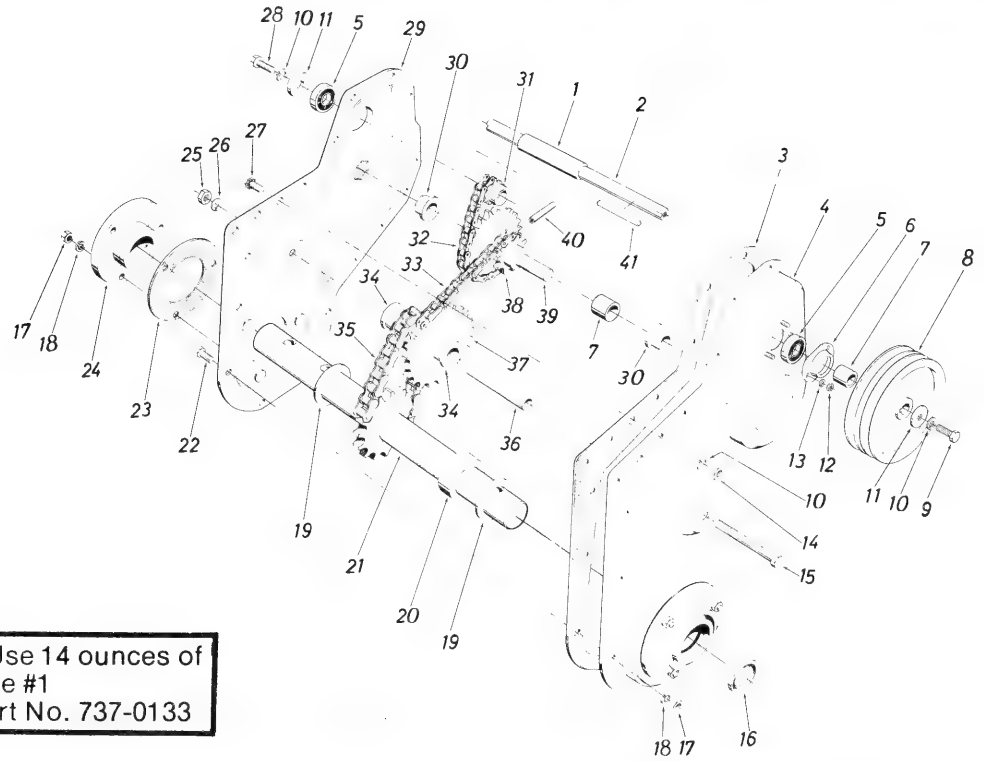
(c) Remove spark plug, pour 1 ounce (2 or 3 tablespoons) of S.A.E.-30 oil into cylinder and pull crank cord out slowly to distribute oil. Replace spark plug.

Just as your automobile needs professional mechanical maintenance from time to time, so does your air cooled engine. Cleaning and adjusting of the carburetor and periodic replacement of the spark plug and ignition points is made necessary by NORMAL use.

Professional Air Cooled Engine service is as close as your nearest SEARS SERVICE DEPARTMENT.

A yearly check-up or tune-up by Sears is a good idea to avoid breakdowns or delay...do it at the end of the season, then you're ready for the next.

Repair Parts 5-H.P. Tiller Model 247.298750



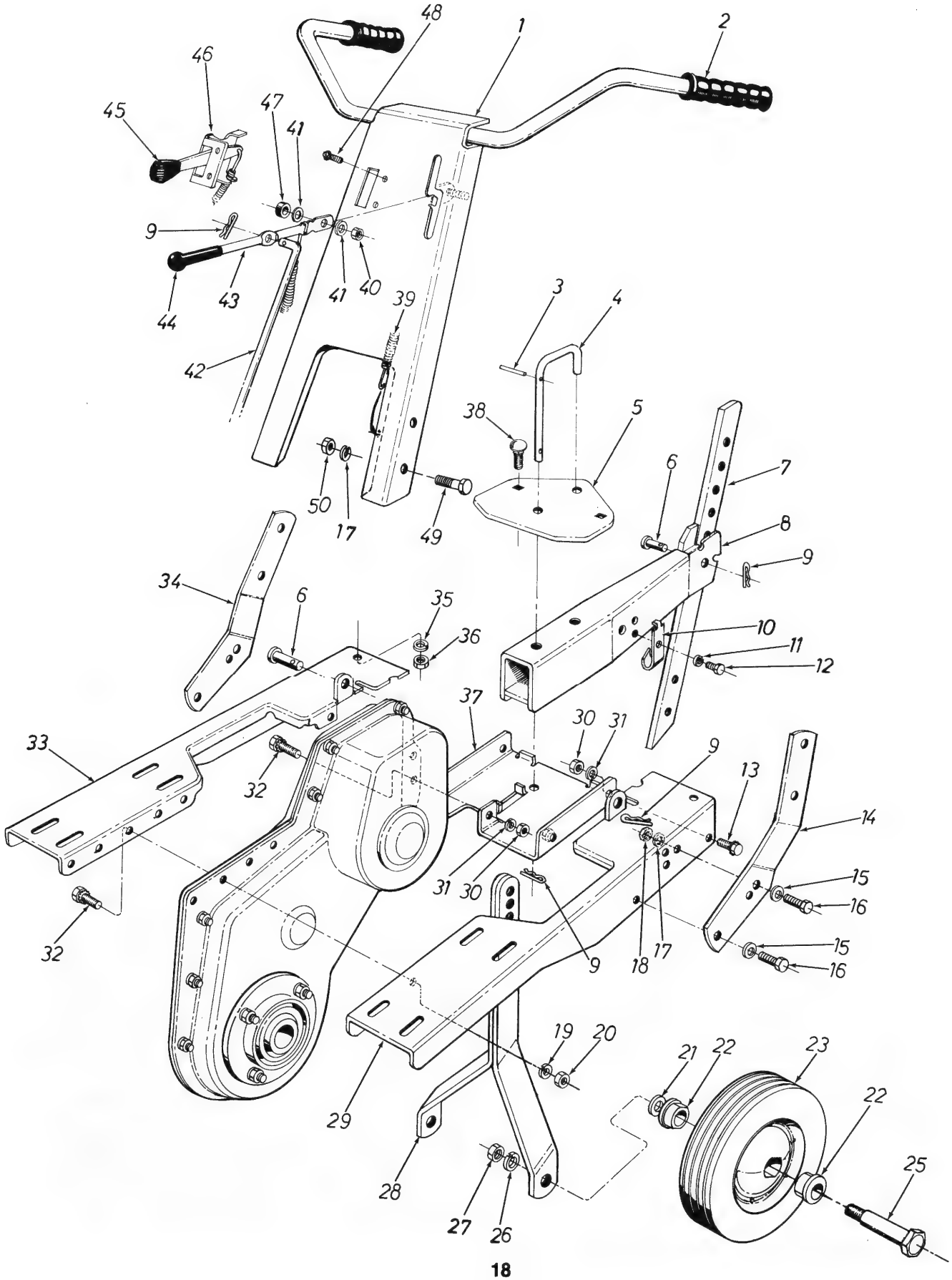
NOTE: Use 14 ounces of Plastilube #1
Order Part No. 737-0133

Repair Parts Transmission 04699

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	750-0315	Spacer .657 I.D. x .78 O.D. x 2.19	22	710-0195	Hex Scr. ¼-28 x .62" Lg.*
2	738-0182	Jack Shaft	23	721-0133	Gasket for Bearing Hsg.
3	721-0132	Gasket for Housing	24	741-0198	Bearing Housing Ass'y.
4	06790	Housing Half—L.H.	25	712-0798	Hex Nut 3/8-16 Thd.*
5	741-0155	Ball Bearing .625 I.D. x 1.375 O.D.	26	736-0169	L-Wash. 3/8" Scr.*
6	05034	Bearing Housing	27	710-0322	Hex Sems Scr. 5/16-18 x 1.00" Lg.*
7	750-0229	Spacer .625 I.D. x .88 O.D. x 1.035	28	710-0538	Hex Scr. 5/16-18 x .62" Lg. Special
8	756-0262	Chain Case Pulley 6.00" Dia.	29	06788	Housing Half—R.H.
9	710-0643	Hex Scr. 5/16-18 x 1.00" Lg. Special	30	748-0229	Hex Flanged Bearing .630 I.D.
10	736-0119	L-Wash. 5/16" Scr.*	31	713-0206	Sprocket 10 Teeth x .500 Pitch
11	736-0231	Fl-Wash. 5/16 I.D. x 1.125 O.D. x .125	32	713-0131	#41 Chain ½" Pitch x 33 Links Endless
12	712-0287	Hex Nut ¼-20 Thd.*	33	713-0186	#42 Chain ½" Pitch x 48 Links Endless
13	736-0329	L-Wash. ¼" Scr.*	34	748-0855	Flange Bearing .628 I.D.
14	712-0267	Hex Nut 5/16-18 Thd.*	35	713-0187	#50 Chain 5/8" Pitch x 28 Links Endless
15	710-0644	Hex Scr. 3/8-16 x 3.25" Lg.	36	738-0320	Sprocket Shaft
16	721-0102	Oil Seal 1" I.D. x 1.357 O.D.	37	713-0182	Sprocket Bearing Sleeve Ass'y.
17	712-0138	Hex Nut ¼-28 Thd.*	38	713-0181	Sprocket Sleeve Ass'y.
18	736-0329	L-Wash. ¼" Scr.*	39	738-0308	Sprocket Shaft
19	736-0259	Fl-Wash. 1.0" I.D. x 1.62 O.D. x .090	40	715-0114	Spring Pin Spiral ¼" Dia. x 1.5" Lg.
20	750-0314	Spacer 1.0" I.D. x 2.0" O.D. x .68	41	714-0133	Sq. Key 3/16 x 1.50" Lg.
21	06800	Tine Shaft Ass'y.			

*Standard Hardware Items— May Be Purchased Locally.

Repair Parts 5-H.P. Tiller Model 247.298750

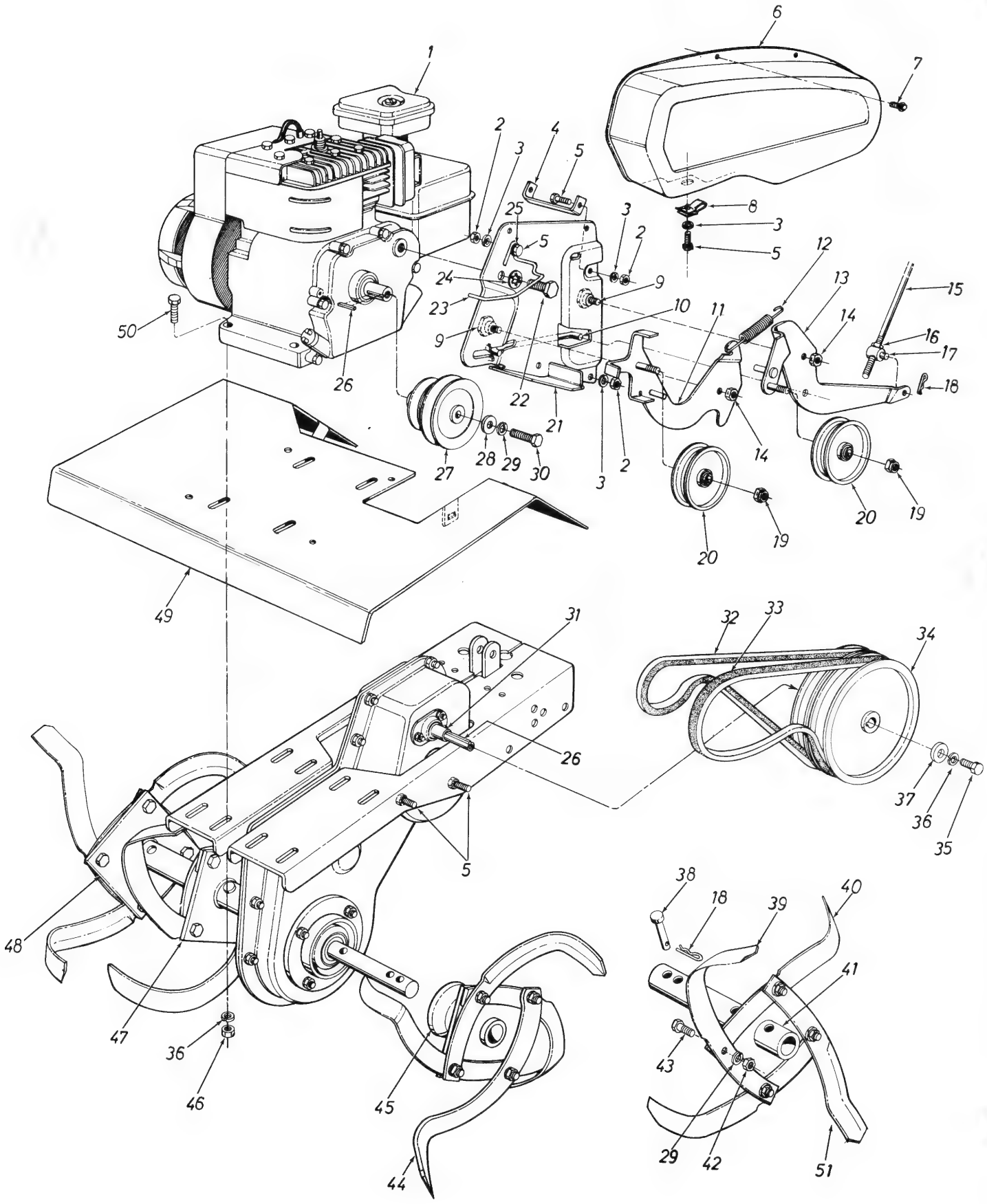


Repair Parts 5-H.P. Tiller Model 247.298750

REF. NO.	PART NO.	DESCRIPTION
1	04777—788	Handle Assembly
2	01166	Grip
3	715-0119	Spring Pin Roll 5/32" Dia. x 1.12 Lg.
4	04602	"U"-Clevis Pin .500" Dia.
5	04586—788	"U"-Channel Plate
6	711-0599	Clevis Pin
7	06811	Depth Stake
8	06807—788	Depth Stake Support Ass'y.
9	714-0145	Internal Cotter Pin ½" Dia.
10	732-0322	Depth Stake Spring
11	736-0329	L-Wash. ¼" Scr.*
12	710-0599	Thread Rolling Scr. ¼-20 x .50" Lg.
13	710-0198	Hex Sems Scr. 5/16-18 x .75" Lg.*
14	06805—788	Handle Bracket—L.H.
15	736-0105	Belleville Wash. 3/8" I.D.
16	710-0152	hex Scr. 3/8-24 x 1.00" Lg.*
17	736-0169	L-Wash. 3/8" Scr.*
18	712-0241	Hex Nut 3/8-24 Thd.*
19	736-0119	L-Wash. 5/16" Scr.*
20	712-0267	Hex Nut 5/16-18 Thd.*
21	736-0253	Belleville Wash.
22	741-0116	Flange Bearings w/Flats .631 I.D.
23	734-0584	Wheel Ass'y. 10.0 x 1.750
24	04699	Transmission Complete
25	738-0318	Shoulder Scr. .625" Dia. x 2.75" Lg.
26	736-0921	L-Wash. ½" Scr.*
27	712-0239	Hex Cent. L-Nut ½-20 Thd.
28	06813 —788	Wheel Bracket Ass'y.
29	06792 —788	Engine "U"-Channel Ass'y —L.H.
30	712-0267	Hex Nut 5/16-18 Thd.*
31	736-0119	L-Wash. 5/16" Scr.*
32	710-0322	Hex Sems Scr. 5/16-18 x 1.00" Lg.*
33	06794 —788	Engine "U"-Channel Ass'y. —R.H.
34	06806 —788	Handle Bracket—R.H.
35	712-0267	Hex Nut 5/16-18 Thd.*
36	736-0119	L-Wash. 5/16" Scr.*
37	06816 —788	"U"-Channel Bracket Ass'y.
38	710-0451	Carriage Bolt 5/16-18 x .75" Lg.*
39	732-0191	Extension Spring
40	712-0158	Hex Cent. L-Nut 5/16-18 Thd.
41	736-0159	Fl-Wash. .344" I.D. x .87" O.D.
42	747-0183	Control Rod
43	747-0182	Clutch Lever
44	720-0143	Grip
45	07470	Knob
46	746-0242	Throttle Control Complete
47	735-0126	Rubber Washer
48	710-0160	Hex Wash. Hd. AB Tapp. Scr. #8 x .62" Lg.
49	710-0253	Hex Scr. 3/8-16 x 1.00" Lg.*
50	712-0798	Hex Nut 3/8-16 Thd.*
†	770-7761	Owners Manual
+	777-8517	Warranty Label

*Standard Hardware Items—May Be Purchased Locally.
†Not Illustrated

Repair Parts 5-H.P. Tiller Model 247.298750



Repair Parts 5-H.P. Tiller Model 247.298750

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	752-0476	Engine 5 H.P. B. & S. 130202-0523-01	29	736-0169	L-Wash. 3/8" Scr.*
2	712-0287	Hex Nut ¼-20 Thd.*	30	710-0191	Hex Scr. 3/8-24 x 1.25" Lg.*
3	736-0329	L-Wash. ¼" Scr.*	31	750-0229	Spacer .635 I.D. x .88 O.D. x 1.035 Lg.
4	06801	Support Brkt.	32	754-0201	"V"-Belt ½" x 41" Lg.—Reverse
5	710-0252	Hex Scr. ¼-20 x .75" Lg.*	33	754-0154	"V"-Belt ½" x 37" Lg.—Forward
6	06796 —312	Belt Guard	34	756-0262	Chain Case Pulley 6.0" Dia.
7	710-0599	Thread Rolling Scr. ¼-20 x .50" Lg.	35	710-0643	Hex Scr. 5/16-18 x 1.00" Lg. Spec.
8	712-0185	"U"-Type Speed Nut	36	736-0170	Shake-Proof Washer
9	738-0281	Shoulder Scr. .625 Dia. x .170" Lg.	37	736-0231	Fl-Wash. 5/16" I.D. x 1.120 O.D.
10	747-0180	Control Rod	38	711-0599	Clevis Pin
11	06786	Reverse Idler Brkt. Ass'y.	39	742-0175	Tine—L.H.
12	732-0433	Spring-Idler Brkt.	40	742-0174	Tine—R.H.
13	06784	Forward Idler Brkt. Ass'y.	41	06797	Outer Tine Adapter Ass'y.
14	712-0375	Hex Cent. L-Nut 3/8-16 Thd.	42	712-0241	Hex Nut 3/8-24 Thd.*
15	747-0183	Clutch Control Rod	43	710-0191	Hex Scr. 3/8-24 x 1.25" Lg.*
16	712-0195	Speed Nut 3/8-24 Thd.	44	06821	Inner Tine Ass'y. Comp.—L.H.
17	711-0392	Ferrule	45	06798	Inner Tine Adapter Ass'y.
18	714-0145	Inter Cotter Pin ½" Dia.	46	712-0267	Hex Nut 5/16-18 Thd.*
19	712-0262	Hex Jam Nut 3/8-24 Thd.	47	06822	Inner Tine Ass'y. Comp.—R.H.
20	756-0225	Fl-Idler w/Flanges 3.12 O.D. x .75	48	04696	Outer Tine Ass'y. Comp.—R.H.
21	06803	Clutch Mounting Plate	49	04776	Tine Shield
22	710-0121	Hex Scr. ½-20 x .75" Lg.*	50	710-0442	Hex Scr. 5/16-18 x 1.50" Lg.*
23	747-0181	Belt Guard Rod	51	04695	Outer Tine Ass'y. Comp.—L.H.
24	736-0114	Internal L-Wash. ½" I.D.			
25	736-0463	Fl-Wash. ¼" I.D.			
26	714-0133	Sq. Key 3/16 x 1.50" Lg.*			
27	756-0261	Engine Pulley			
28	736-0258	Fl-Wash. 3/8" I.D. x 1.00" O.D.			

*Standard Hardware Items—May Be Purchased Locally.

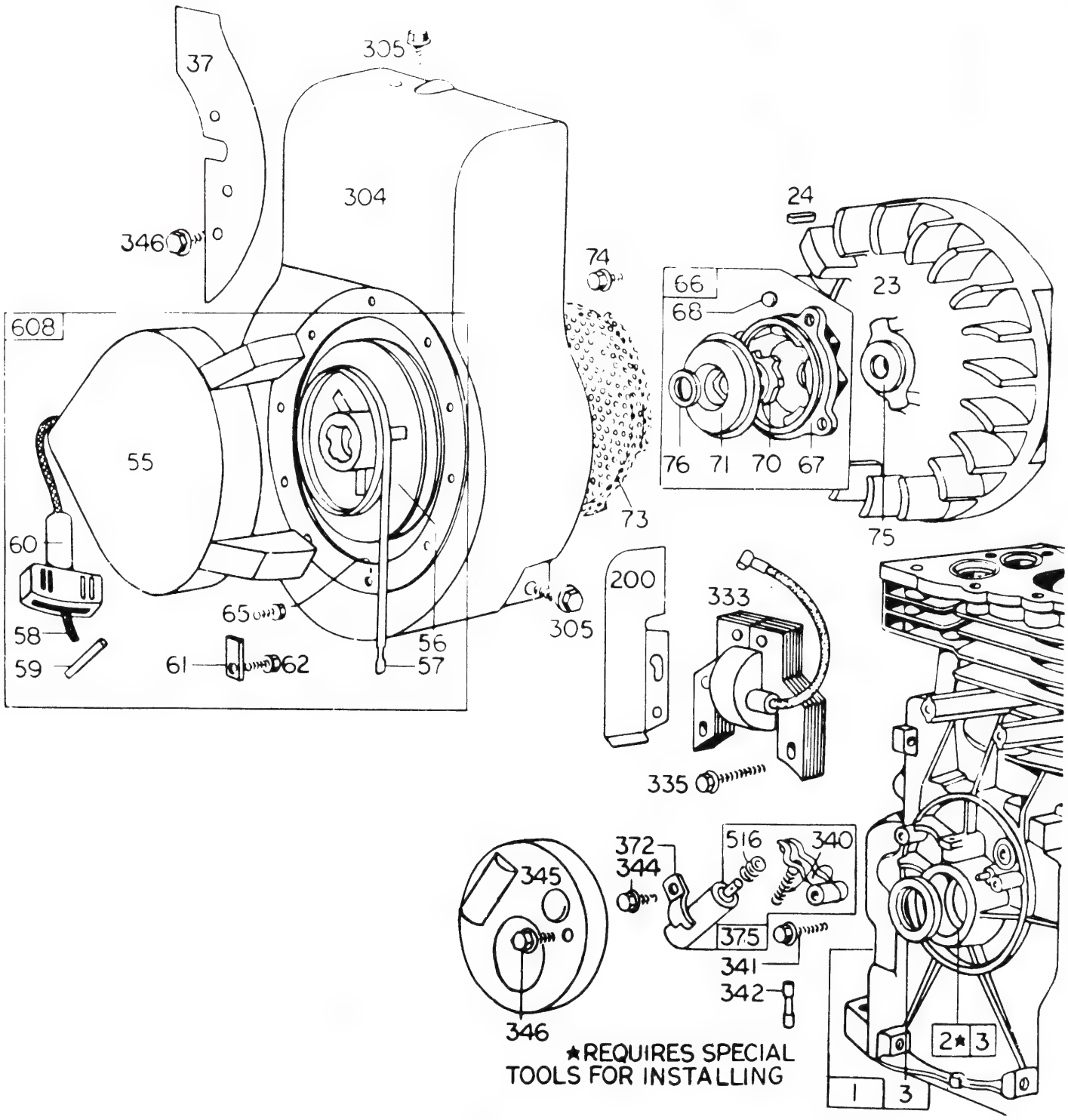
TILLER ACCESSORIES

Til-Row Attachment	8" Furrower
Leveling/Snow-Blade Kit	15" Sweep Cult./Hoe
V-Bar Cultivating Kit	32" Leveling Rake
Drag Stake Cultivating Kit	Cultivating Shields
V-Bar Frame	32" Leveling/Snow-Blade
4-pt. Cultivator Tines	13 x 5.00—6 Pneumatic Traction Tires
Hiller/Furrower	Wheel Weights
Depth Gauge Wheels	Tire Chains (Pr.)
6-Tang Universal Cult.	Wheel Weights F/Leveling Snow-Blade
Drag Stake	

THESE ACCESSORIES ARE AVAILABLE IN THE SEARS BIG SPRING CATALOG.

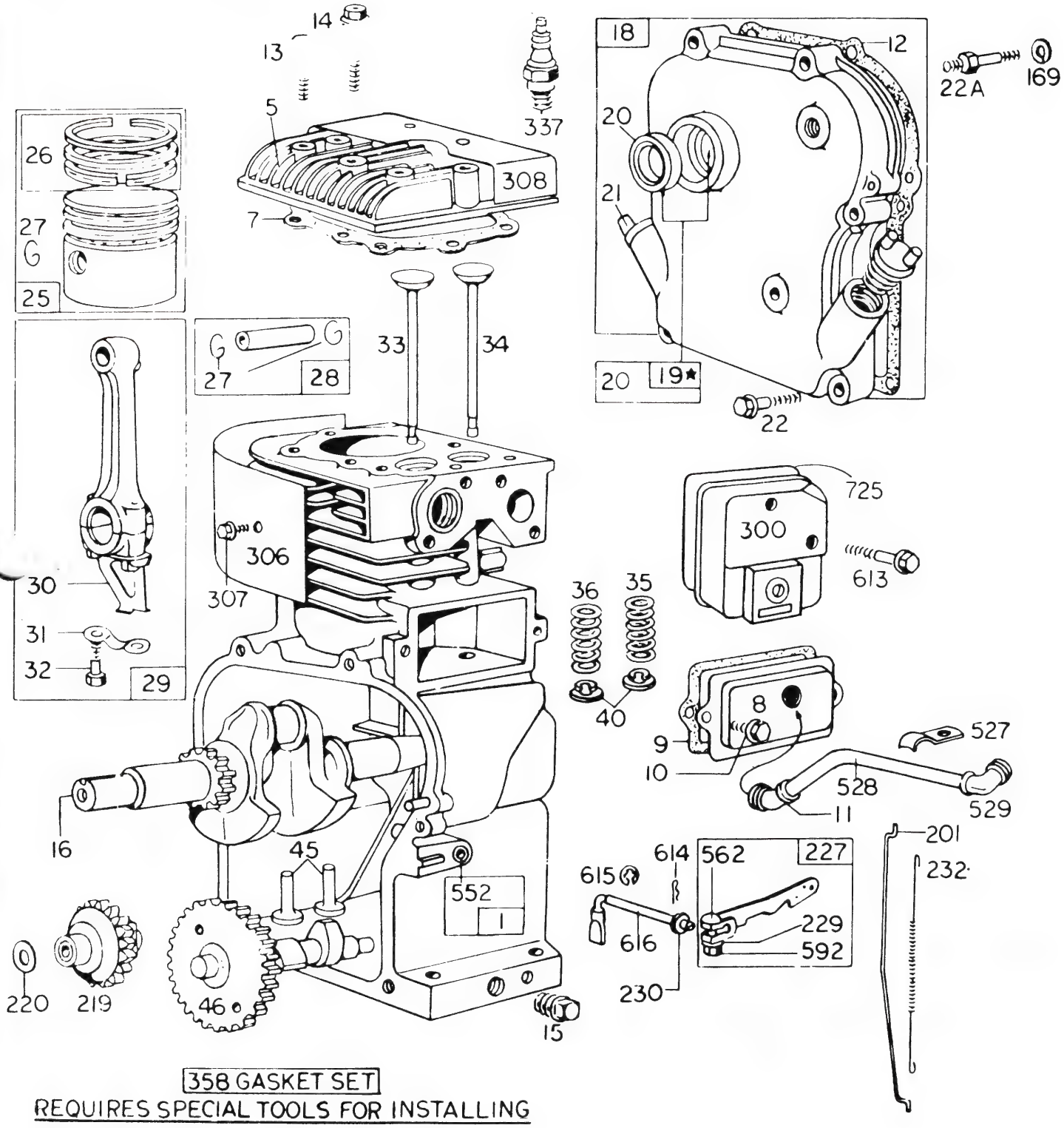
Repair Parts

5-H.P. CHAIN DRIVE TILLER MODEL 247.298750
ENGINE MODEL 130202 TYPE 0523-01



Repair Parts

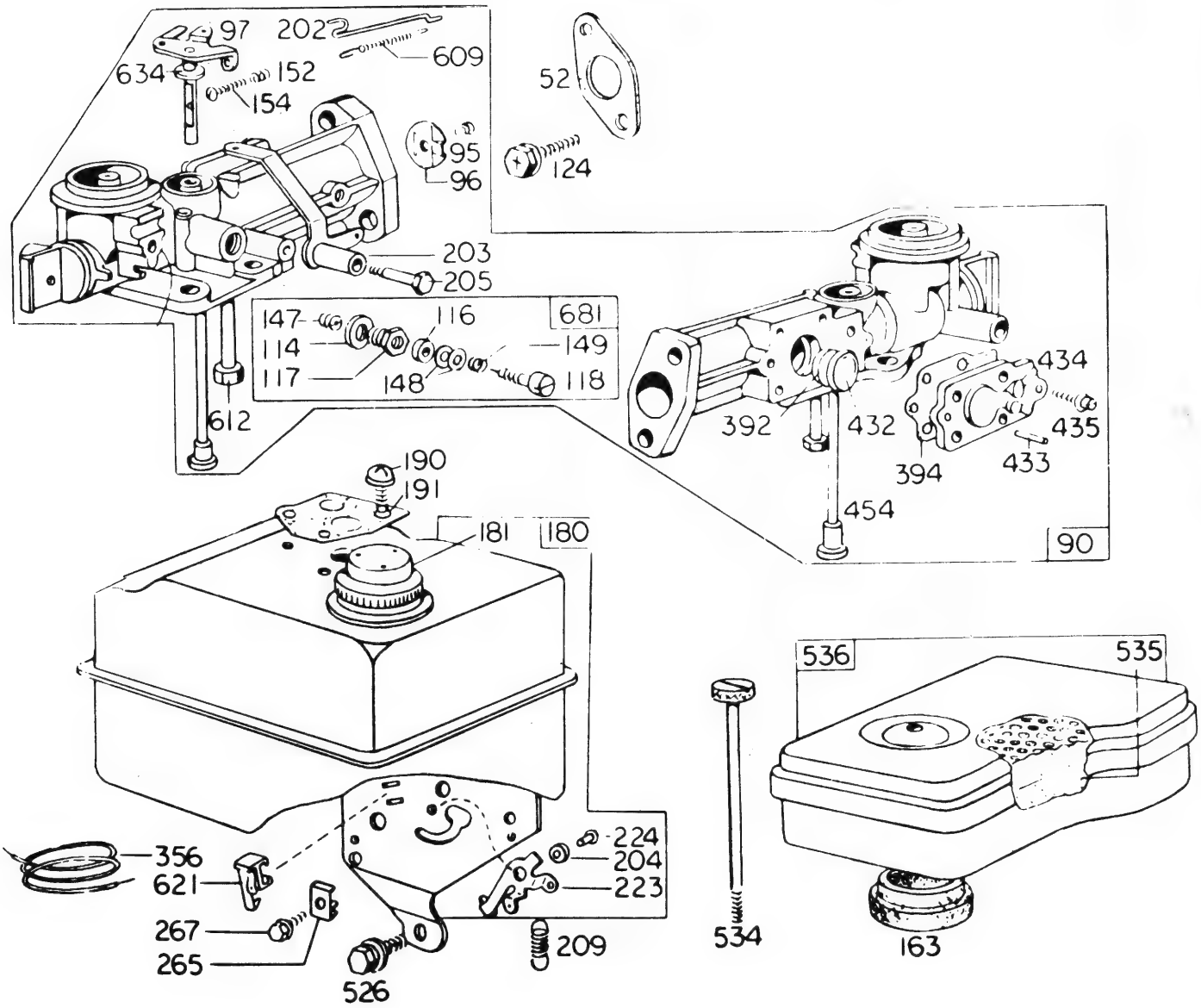
5-H.P. CHAIN DRIVE TILLER MODEL 247.298750
ENGINE MODEL 130202 TYPE 0523-01



358 GASKET SET
REQUIRES SPECIAL TOOLS FOR INSTALLING

Repair Parts

5-H.P. CHAIN DRIVE TILLER MODEL 247.298750
ENGINE MODEL 130202 TYPE 0523-01



Repair Parts

5-H.P. CHAIN DRIVE TILLER MODEL 247.298750
ENGINE MODEL 130202 TYPE 0523-01

REF. NO.	PART NO.	DESCRIPTION
1	299540	Cylinder Assembly
2	297565	Bushing—Cylinder NOTE: Requires special tools for installation.
3	89660	Seal—Oil
5	211542	Head—Cylinder
7	*270383	Gasket—Cylinder Head
8	294178	Breather—Valve Chamber
9	*27549	Gasket—Valve Cover
10	93394	Screw—Breather Mounting Sem
11	66578	Grommet—Breather Tube
12	*270080	Gasket—Crankcase—.015" Thk. (Standard)
	270125	Gasket—Crankcase—.005" Thk.
	270126	Gasket—Crankcase—.009" Thk.
13	93368	Screw—Cylinder Head (2-3/32" Long)
14	93369	Screw—Cylinder Head (2-15/32" Long)
15	91249	Plug—Pipe, ¼" Standard, Square Head
16	261299	Crankshaft
18	297602	Cover Assembly—Crankcase
19	297603	Bushing—Crankcase Cover NOTE: Requires special tools for installation.
20	294606	Seal—Oil
21	66768	Plug—Oil Filler
22	93032	Screw—Crankcase Cover Mounting Sem
22A	93656	Stud—Used to Mount Crankcase Cover
23	297229	Flywheel—Magneto
24	61760	Key—Flywheel
		RING SETS: NOTE: For Chrome Piston Ring Set—Standard Size—Order Part No. 299742.
25	298904	Piston Assembly—Standard
	298905	Piston Assembly—.010" O.S.
	298906	Piston Assembly—.020" O.S.
	298907	Piston Assembly—.030" O.S.
26	298982	Ring Set—Standard Piston Consists of:
	211467	Ring, Piston, Compression, Top, Standard
	211468	Ring, Piston, Compression, Center, Standard
	211469	Ring, Piston, Oil, Standard
	298983	Ring Set—.010" O.S. Piston Consists of:
	211504	Ring Piston, Compression, Top, .010" O.S.
	211503	Ring Piston, Compression, Center .010" O.S.
	211505	Ring, Piston, Oil, .010" O.S.
	298984	Ring Set—.020" O.S. Piston Consists of:
	211507	Ring, Piston, Compression, Top, .020" O.S.
	211506	Ring, Piston, Compression, VSON
	211508	Ring, Piston, Oil, .020" O.S.
	298985	Ring Set—.030" O.S. Piston Consists of:
	211511	Ring, Piston, Compression, Top, .030" O.S.
	211510	Ring, Piston, Compression, Center, .030" O.S.
	211512	Ring, Piston, Oil, .030" O.S.
27	26026	Lock—Piston Pin
28	298909	Pin Assembly—Piston—Stand.
	298908	Pin Assembly—Piston—.005" O.S.
29	299430	Rod Assembly—Connecting NOTE: For Connecting Rod with .020" undersize Crankpin Bore—Order No. 390459.
30	221890	Dipper—Connecting Rod
31	221876	Lock—Connecting Rod Screw
32	92296	Screw—Connecting Rod
33	211119	Valve—Exhaust
34	261044	Valve—Intake
35	260552	Spring—Intake Valve
36	26478	Spring—Exhaust Valve
37	222443	Guard Flywheel
40	93312	Retainer—Valve Spring
45	260642	Tappet—Valve
46	211117	Gear—Cam
52	*27355	Gasket—Carburetor Mounting
55	299431	Housing—Rewind Starter
56	295871	Pulley—Rewind Starter
57	294303	Spring—Rewind Starter
58	66564	Rope—Rewind Starter
59	230228	Pin—Starter Grip
60	66728	Grip—Starter Rope
61	68848	Bumper—Starter Pulley
62	93254	Screw—Pulley Bumper Mtg.
65	93067	Screw—Rewind Starter Housing Mounting
66	298310	Clutch Assembly Rewind Starter
67	211383	Housing—Starter Clutch
68	63770	Ball—Clutch
70	298436	Ratchet—Rewind Starter
71	221653	Washer—Clutch Retainer
73	221923	Screen—Starter Pulley
74	93490	Screw—Sem
75	220865	Washer—Spring
76	68238	Washer—Ratchet Sealing
90	299437	Carburetor Assembly
95	93385	Screw—Throttle Valve to Shaft Sem
96	211203	Throttle—Carburetor
97	299212	Shaft and Lever—Throttle
114	66594	Gasket—Needle Valve Nut
116	65978	Packing—Needle Valve
117	230590	Nut—Needle Valve
118	23433	Valve—Needle
124	93357	Screw—Hex Head

*Included in Gasket Set—Part No. 297615.

Repair Parts

5-H.P. CHAIN DRIVE TILLER MODEL 247.298750
ENGINE MODEL 130202 TYPE 0523-01

REF. NO.	PART NO.	DESCRIPTION
147	230591	Seat—Needle Valve
148	22235	Washer—Needle Valve (2)
149	26336	Spring—Needle Valve
152	260575	Spring—Throttle Adjustment
154	92634	Screw—Machine, Round Head —5-40 x 5/8"
163	*27660	Gasket—Air Cleaner Mounting
169	90832	Washer—Lock
180	297600	Tank Assembly—Fuel
181	298425	Cap—Fuel Tank
190	93341	Screw—Fuel Tank Mounting Sem
191	*27911	Gasket—Fuel Tank Mounting(2)
200	221480	Guide—Air
201	260661	Link—Governor
202	260678	Link—Throttle
203	297718	Crank—Bell
204	230844	Bushing—Governor Lever
205	93566	Screw—Shoulder
209	260695	Spring—Governor
219	297656	Gear—Governor
220	221551	Washer—Thrust
223	221517	Lever—Governor Control
224	93491	Rivet—Governor Control Lever Mounting
227	297601	Lever Assembly—Governor
229	220680	Washer—Governor Lever
230	221559	Washer—Governor Lever
232	260478	Spring—Governor Link
265	221535	Clamp—Casing
267	93496	Screw Sem
300	297506	Muffler—Exhaust
304	299410	Housing—Blower
305	93158	Screw—Blower Housing Mtg.
306	221511	Shield—Cylinder
307	90042	Screw—Cylinder Shield Mounting Sem
308	221512	Cover—Cylinder Head
335	93414	Screw—Armature Mtg. Sem
337	298809	Plug—Spark (with Gasket) NOTE: Spark Plugs 298809, Ignition Cable Terminal No. 221798.
340	26018	Spring—Breaker Arm
341	93381	Screw—Breaker Arm Mounting Sem
342	65704	Plunger—Breaker Point
344	93042	Screw—Condenser Clamp Mounting Sem
345	220366	Cover—Breaker Point and Condenser
346	93014	Screw—Dust Cover Mounting
356	295413	Wire—Ground
358	297615	Gasket Set
372	220477	Clamp—Condenser
375	294628	Breaker Points and Condenser Set Note; 299061 Ignition Kit Includes:
	294628	Set
	294628	Plunger
	61760	Key—Flywheel
392	260455	Spring—Fuel Pump Diaphragm
394	270026	Diaphragm
432	221377	Cap—Spring
433	93265	Pin—Diaphragm Cover
434	210959	Cover—Diaphragm
435	93141	Screw—Diaphragm Cover
454	296178	Housing—Fuel Pipe Screen
516	260374	Spring—Connector
526	93343	Screw—Tank Bracket Mounting Sem
527	221514	Clamp—Breather Tube
528	230722	Tube—Breather
529	67838	Grommet—Breather Tube
534	93322	Screw—Air Cleaner
535	27987	Element—Air Cleaner
536	297036	Cleaner Assembly—Air
552	230732	Bushing—Governor
562	92613	Bolt—Governor Lever
592	90356	Nut—Hex—10-24
608	299334	Starter Assembly—Rewind
609	260694	Spring—Throttle Link
612	296811	Pipe—Fuel
613	93377	Screw—Muffler Mounting
614	93306	Cotter—Hair Pin
615	93307	Retainer—E-Ring
616	230723	Crank—Governor
621	297472	Switch—Stop
634	270167	Washer, Throttle Shaft
681	299060	Needle Valve Kit
725	221885	Shield—Heat

*Included in Gasket Set—Part No. 297615.

Sears

owners manual

MODEL NO. 247.298750

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HOW TO ORDER REPAIR PARTS

The Model Number will be found stamped on a plate attached to the chassis. Always mention the Model Number when requesting service or repair parts for your tiller.

All parts listed herein may be ordered through SEARS ROEBUCK AND CO. or SIMPSON SEARS LIMITED RETAIL or CATALOG STORE.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

1. The PART NUMBER
2. The MODEL NUMBER 247.298750
3. The PART DESCRIPTION
4. The NAME OF MERCHANDISE— Tiller

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for expedited handling.

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